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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,789	05/04/2001	Bruce A. Jennings	RAR358.01	7896
7590	10/10/2003			
Richard A. Ryan RYAN & ENGNATH 8469 N. Millbrook, Suite 104 Fresno, CA 93720				
			EXAMINER TAMAI, KARL I	
			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 10/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AM

Office Action Summary	Application No.	Applicant(s)	
	09/848,789	JENNINGS, BRUCE A	
	Examiner	Art Unit	
	Tamai IE Karl	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 28-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,9-18 and 24-27 is/are rejected.
- 7) ☒ Claim(s) 3-8 and 19-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-27 in paper dated 6/27/2003 is acknowledged.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the power input for storing electrical power, power output for retrieving electrical power, the outside diameter having a ratio of 2:1 with the inside diameter must be shown or the features canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 9-11, 12, 16-18, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett (US 4870310) and Post (US 6111332) and Hagiwara (JP 56-063,117). Triplett teaches an electromechanical battery having a sealed housing 20 with a central core 18 with an inner raceway. Triplett teaches a teardrop composite rotor 29 supported by magnetic bearings having close loop (short circuited) induction coils 17 on the rotor. Triplett teaches a motor/generator 32 for providing power input and output to the battery. Triplett teaches every aspect of the invention except halbach permanent magnets on the raceway opposite the induction coils on the rotor and the battery having a rotor spinning about the vertical axis. Post teaches electro-mechanical batteries can have halbach permanent magnets providing flux to the close loop induction coils create a passive (without sensors and control circuits) bearing system. Hagiwara teaches an induction coil magnetic bearing rotating about the vertical axis. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the electromechanical battery of Triplett with permanent magnets on the stator core because Post teaches that the permanent magnets will provide a

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passive bearing system, and with the rotor positioned to rotate around the vertical axis because Hagiwara teaches a closed loop coil can provide bouyance to a vertical rotor.

7. Claims 13 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett (US 4870310) and Post (US 6111332) and Hagiwara (JP 56-063,117). Triplett, Post, and Hagiwara teach every aspect of the invention except the outside to inside diameter being 2:1. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the electromechanical battery of Triplett, Post, and Hagiwara with the outside to inside diameter being 2:1 in order to optimized the flywheel mass, and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (see *In re Aller*, 105 USPQ 233).

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett (US 4870310) and Post (US 6111332) and Hagiwara (JP 56-063,117), in further view of Murakami et al. (Murakami)(JP 59-373,323). Triplett, Post, and Hagiwara teach every aspect of the invention except the interface between the coil and flywheel. Murakami teaches an interface 36 between the flywheel 3 and the rotor magnet to secure the magnet to the flywheel. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the electromechanical battery of Triplett, Post, and Hagiwara with the interface between the coil and flywheel secure the coil magnet to the flywheel, as shown in Murakami.

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Allowable Subject Matter

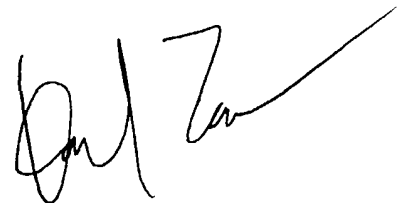
9. Claims 3-8 and 19-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703) 308-1371. The facsimile number for the Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Karl I Tamai
PRIMARY PATENT EXAMINER
September 26, 2003

A handwritten signature in black ink, appearing to read 'Karl I. Tamai', with a long horizontal stroke extending to the right.

KARL TAMAI
PRIMARY EXAMINER